

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



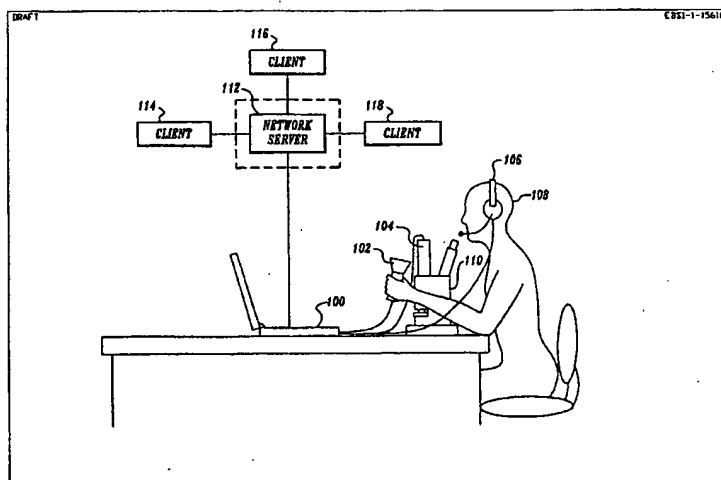
(43) International Publication Date
8 February 2001 (08.02.2001)

PCT

(10) International Publication Number
WO 01/09595 A3

- (51) International Patent Classification⁷: **H01J 49/02.** (74) Agent: CRUZ, Laura, A.; Christensen O'Connor Johnson & Kindness PLLC, Suite 2800, 1420 Fifth Avenue, Seattle, WA 98101 (US).
G06F 17/30, G01N 23/205
- (21) International Application Number: PCT/US00/21043
- (22) International Filing Date: 2 August 2000 (02.08.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/146,737 2 August 1999 (02.08.1999) US
09/631,185 2 August 2000 (02.08.2000) US
- (71) Applicant: **EMERALD BIOSTRUCTURES, INC.**
[US/US]; 7869 N.E. Day Road, Bainbridge Island, WA 98110 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
29 November 2001
- (72) Inventors: **STEWART, Lansing, J.**; 11727 N.E. Kirk Avenue, Bainbridge Island, WA 98110 (US). **KIM, Hidong**; 9999 Winther Road, Bainbridge Island, WA 98110 (US). **FLEUCHAUS, Lucius**; 10618 N.E. 13th Street, Bellevue, WA 98004 (US). **DUNN, Paul**; 6761 N.E. Seabold Road, Bainbridge Island, WA 98110 (US).
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND SYSTEM FOR CREATING A CRYSTALLIZATION RESULTS DATABASE



(57) Abstract: Disclosed is a system and a method for depositing crystallization observations into a relational database. The system includes a computer, microscope, and a headset having a microphone and headphones. Crystallization observations are deposited into the database by verbal commands. Verbal commands also drive the crystallization apparatus plates to position the apparatus wells within the microscope field of vision. The system is integrated with a software application which enables the user to build the trials, matrices, solutions, and macromolecules to be used in the crystallization trials. The user is guided through the crystallization trial setup by a multitude of managers and builders of the software application. The software application also provides numerous tools to query the database and display results in a multitude of formats.

BEST AVAILABLE COPY

WO 01/09595 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/21043

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J49/02 G06F17/30 G01N23/205

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GRAY P M D ET AL: "Macromolecular structure information and databases" TIBS TRENDS IN BIOCHEMICAL SCIENCES, EN, ELSEVIER PUBLICATION, CAMBRIDGE, vol. 21, no. 7, 1 July 1996 (1996-07-01), pages 251-256, XP004050879 ISSN: 0968-0004 the whole document --- -/--	1,64,71, 73,87

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

S document member of the same patent family

Date of the actual completion of the international search

6 June 2001

Date of mailing of the international search report

12/06/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hulne, S

INTERNATIONAL SEARCH REPORT

In International Application No

PCT/US 00/21043

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>NIENHAUS G U ET AL: "A DATA COLLECTION SYSTEM FOR PROTEIN CRYSTALLOGRAPHY WITH AREA-SENSITIVE PROPORTIONAL COUNTERS" REVIEW OF SCIENTIFIC INSTRUMENTS,US,AMERICAN INSTITUTE OF PHYSICS. NEW YORK, vol. 62, no. 4, 1 April 1991 (1991-04-01), pages 1063-1066, XP000218243 ISSN: 0034-6748 the whole document -----</p>	<p>1,64,71, 73,87</p>

THIS PAGE BLANK (USPTO)